DOCUMENT RESUME

ED 121 396 JC 760 240

AUTHOR Gammel, Jeanne M.; And Others
TITLE Follow-Up Study of 1969 to 1975 Graduates of the Division of Technology of New York City Community College.
INSTITUTION New York City Community Coll., Brooklyn, N.Y.
PUB DATE Apr 76
NOTE 134p.; Occasional light print

EDRS PRICE MF-$0.83 HC-$7.35 Plus Postage
DESCRIPTORS Community Colleges; Employment Experience; *Engineering Technology; *Followup Studies; *Graduate Surveys; *Junior Colleges; Participant Satisfaction; Salaries; Student Attitudes; *Technical Education; Vocational Followup
IDENTIFIERS *New York City Community College

ABSTRACT

This study examines the achievements of seven graduating classes (1969 to 1975) in 12 curricula of the Division of Engineering Technology at New York City Community College (NYCCC). In all, 2,087 technology graduates were surveyed, and 922 usable responses were received (44 percent). Achievement was measured in terms of graduate activities with the following variables: present occupational status; field retention of employed graduates; proportions in senior, supervisory, managerial or professional positions; salaries; first job field retention and salaries; salary differences, change of employers and change of job titles between first and present jobs; further college attendance; further degrees sought or completed; and other variables related to employment and further education. In addition, several variables measured alumni perceptions of the NYCCC curricula such as: relationships between first and present jobs and the curricula; preparation for a career; preparation for further education; helpfulness of elective courses; whether they would recommend their curricula to their friends; citation of outstanding instructors; the effects of the economy on students' careers. Twenty-nine tables of data are presented, and the survey instrument is appended. (Author/NHM)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED121396

U S DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

FOLLOW-UP STUDY OF 1969 TO 1975 GRADUATES OF THE DIVISION OF TECHNOLOGY OF NEW YORK CITY COMMUNITY COLLEGE

by

Jeanne M. Gammel, Ed.D.

Stanley M. Brodsky, Ph.D.

Richard L. Alfred, Ed.D.

New York City Community College

April 1976

2

JC 760 250

PREFACE

During the formative years of the community college movement the priority of resources focused on growth. Educational energies were directed toward attempts to keep up with increasing numbers of students. New programs were launched, new facilities were located or constructed and governance structures were hastily planned to involve the community, the faculty and the students in making decisions.

Now, as community colleges approach the beginning of the 80's, they are experiencing the first effects of the "steady state." Concern is expressed less with the quantity and more with the quality of educational programs. Quality education, with its myriad of definitions, does not depend primarily on the number of students, or on the diversity of programs, or on new devices for decision making although these factors certainly contribute. The quality of education depends primarily on the quality of the instructional program. If the college of the future is to realize even a modicum of its potential, faculty and administrators will have to begin to pay as much attention to the outputs of instructional programs as to the number of students, buildings, and organizational structures.

The purpose of this study was to examine the achievements of seven graduating classes (1969 to 1975) in twelve curricula of the Division of Engineering Technology at New York City Community

college. Achievement was measured in terms of graduate activities with the following variables: present occupational status; field retention of employed graduates; proportions in senior, supervisory, managerial or professional positions; salaries; first job field retention and salaries; salary differences, change of employers and change of job titles between first and present jobs; further college attendance; further degrees sought or completed; and other variables related to employment and further education. In addition several variables measured alumni perceptions of the SPCC curricula such as: relationships between first and present jobs and the curricula; preparation for a career; preparation for further education; helpfulness of elective courses; whether they would recommend their curricula to their friends; citation of outstanding instructors; as well as the effects of the economy on their careers. A great deal of information was elicited as reported in the pages that follow. This is considered useful in view of the overall response rate of forty-four percent.

The authors are indebted to a great many people. This study would not have come to fruition were it not for the technical assistance of Judy Tarsee and Joseph Servello, both of whom spent long hours in the preparation, abstraction and analysis of data. Daniel Norris developed the computer programs used to tabulate the data and produced the necessary statistical base. Diane D'Agostino and her staff at the College's Word Processing Center typed many of the tables.

while Cynthia Silverman also typed several sections of the report. Ernest Lee and his staff in the College's Duplication Center reproduced the report. The authors are grateful for the excellent cooperation of all concerned especially in view of the tight deadline imposed.

The cooperation and support of the experimental institutions, their faculties and staffs in developing the questionnaire, and performing the difficult job of preparing and mailing the materials is sincerely acknowledged as are the efforts of Dean George Salgado and his staff in supervising the Northern Campus preparations and mailings. The departments and chairmen or coordinators involved were:

Architectural Technology	Professor Dennis O. Dash
Automotive Technology	Professor Joseph D. Tipaldi
Construction Technology	Professor Paul Cusack
Environmental Control Technology	Professor Samuel Lucas
Electrical Technology-Brooklyn	Professor Lenni Fiddes
Electrical Technology-Voorhees	Professor Richard Tighe
Electromechanical Technology	Professor Laszlo Berkes
Fire Protection Technology	Professor Sylvia Y. Dash
Industrial Arts Education	Professor Aurelio Bibbo
Machine Tool Technology	Professor Oscar Egli
Mechanical Technology (& Energy Analysis) Technology	Professor John L. Rankin

[illegible]

[illegible] Page

[illegible] iii

[illegible] iv

[illegible] [illegible]

[illegible] [illegible]

[illegible] 1

[illegible] 3

[illegible] 7

[illegible] 10

[illegible] 10

[illegible] 10

[illegible] 11

[illegible] 12

[illegible] 13

[illegible] 14

[illegible] 15

[illegible] 16

[illegible] 16

[illegible] 16

[illegible] 17

[illegible] 17

[illegible] 18

Seite

[illegible] 4

[illegible] 8

[illegible] 10

[illegible] 12

[illegible] 14

[illegible] 16

[illegible] 18

[illegible] 20

[illegible] 22

[illegible] 24

LIST OF FIGURES

Figure	Title	Page
1	Median Annual Salaries vs. Years Since Graduation from New York City Community College - 1951, 1956, 1961, 1966, 1969 and 1971 Classes	16

LIST OF APPENDICES

Appendix	Title	Page
1	Historical Sketch of the Division of Technology	115
2	Copy of Questionnaire - Division of Technology Alumni Survey	119
3	Procedures for Division of Technology Alumni Survey: Mailing and Survey Responses	125
4	Architectural Technology Data by Year and Variables	
5	Automotive Technology Data by Year and Variables	
6	Construction Technology Data by Year and Variables	
7	Design Drafting Technology Data by Year and Variables	
8	Environmental Control Technology Data by Year and Variables	
9	Electrical Technology-Brooklyn Data by Year and Variables	
10	Electrical Technology-Voorhees Data by Year and Variables	
11	Electromechanical Technology Data by Year and Variables	
12	Fire Protection Technology Data by Year and Variables	
13	Industrial Arts Education Data by Year and Variables	
14	Machine Tool Technology Data by Year and Variables	
15	Mechanical Technology Data by Year and Variables	

Over the past 25 years numerous studies have been conducted and reported which attempt to describe the effectiveness of two-year college career programs through the achievements of their graduates. The interest in this subject is understandable, since it is through information of this type that critical decisions can be made regarding the over-all utility and value of career programs. Research on career programs affects the educational status of curricula not only as a result of institutional studies of graduating students, but information is also supplied to state and local agencies concerning the content and design of college curricula and their contribution to business and industrial organizations. More specifically, external agencies want to know how "productive" career programs are; the types of students they prepare; and the success rates of these students on the job.

Evaluation of career programs can take many forms. One method is to administer achievement and ability tests before and after student exposure to college curricula. Another is to examine the condition of resources, such as the quality of instruction and the adequacy of facilities. A third method is to examine post-college experiences and perceptions of former students to determine whether or not their educational and career goals have been achieved. This procedure involves evaluation through follow-up research on graduates and is the subject of this report.

Follow-up studies with positive results can be important in establishing public confidence and support among citizens,

legislators, state boards and agencies of government. On the basis of their appraisals, state boards assign responsibilities for career education and provide or withhold funds, personnel and facilities. Only as institutions accurately describe the effects of their curricula are they in a position to obtain the maximum resources available for a given educational program. The very existence of strong career programs depends on the ability of colleges to convince the public and external agencies that they operate dynamic educational programs capable of training students well.

This report describes post-college activities of graduating students in the Division of Technology at New York City Community College (NYCCC) over the seven-year period, 1969 through 1975. The purpose is to evaluate the effectiveness of Division programs in terms of the achievements of their graduates by studying employment patterns, advanced degrees, continuing education opportunities, and student perceptions of the curriculum and of the economic climate on their jobs.

OBJECTIVES OF THE STUDY

The primary purpose of this study is to examine attitudes and post-college activities of graduates of the Division of Technology at New York City Community College, as indicated by the following objectives:

*To identify the employment patterns of graduates in the Division of Technology

*To examine student perceptions of the impact of the economy on job retention and mobility

- To examine further educational studies pursued by students and the types of programs in which these studies were undertaken

- To examine the relationship between graduates' career patterns and further educational studies in their community college major field

- To examine the attitudes of graduates toward their college experience as preparation for work and for further education

- To examine the perceptions of students in terms of their evaluation of courses and instructors both within the Division of Technology and outside the Division

The results reported are based on these objectives, and conclusions are drawn in terms of their requisite variables.

Since indicators of "success" for graduating students have not been established, the results reported in this study cannot be considered positive or negative. The fact that 60% of the students who were graduated are employed in related technical fields does not tell much about Division programs because no one has said how many students should be employed in various technical fields. That over 60 percent of the students who graduated continued their education at a senior college has significance only if in succeeding years the proportion increases or decreases or if techniques are employed to reduce attrition and to facilitate students' transfer prior to graduation. The value of the study can be determined only by the use of the findings to effect desirable changes within the Division.

[redacted]

Organized in 1946 as the technical component of the New York State Institute of Applied Arts and Sciences in New York City, one of five temporary State technical institutes created in the State, the structure and course offerings of the Division of Technology have undergone considerable change (See Appendix II). The Division presently incorporates five goals into its programs:

- To provide opportunities for students to achieve their educational and vocational goals at post-professional levels in various fields of technology
- To maintain suitable standards of excellence in all of the Divisional offerings
- To be sensitive to the changing demands of the community, government, industry, and technology in general, and to continually examine the programs and practices of the Division in terms of these demands and the educational philosophy of the College
- To achieve and maintain close and cooperative working relationships between the various faculty groups in the Division with a view toward monitoring the effectiveness of all Divisional activities
- To provide the means of developing new programs, particularly those which may have interdepartmental, interdisciplinary, or interdivisional aspects

Career programs in the Division of Technology are designed to prepare students for employment in technical, post-professional, and vocational jobs. The Division offers students a wide choice of associate degree career, career-transfer, and transfer programs, two of which are in engineering-related fields. These programs are designed to match a student's interests and talents to a corresponding cluster of employment opportunities with excellent salaries,

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

[illegible]

[illegible]

[illegible]

[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

[illegible]

[illegible]

[illegible]

TABLE 3

NUMBER OF 1969 TO 1975 TECHNOLOGY GRADUATES BY CAMPUS

Campus	1969 N	1969 %	1970 N	1970 %	1971 N	1971 %	1972 N	1972 %	1973 N	1973 %	1974 N	1974 %	1975 N	1975 %	Total N	Total %
Brooklyn	76	80	75	[illegible]	98	88	107	82	122	75	96	77	135	67	709	77
Voorhees	19	20	19	20	14	12	24	18	40	25	29	23	68	33	213	23
Total	95	100	94	100	112	100	131	100	162	100	125	100	203	100	922	100
Percent per Year		10%		10%		12%		14%		18%		14%		22%		100%

distributions run to tabulate student responses for each question. A cross-tabulation generated two-dimensional tables of frequencies by year of graduation and by curriculum against the dependent variables in the study. After the initial data run, an interim tabulation of results and examples of the data outlay were reviewed so that minor adjustments in procedure could be made to insure accuracy of the data and to fully utilize accumulated data expertise.

Due to space limitations, abbreviations of the technology programs under study are used in some of the tables. Below is a list of Division programs and their appropriate abbreviations.

Program	Abbreviation
Architectural Technology	AR
Automotive Technology	AT
Construction Technology	CT
Design Drafting Technology	DD
Environmental Control Technology	EC
Electrical Technology-Brooklyn	ETB
Electrical Technology-Voorhees	ETV
Electromechanical Technology	EM
Fire Protection Technology	FT
Industrial Arts Education	IA
Machine Tool Technology	MC
Mechanical Technology	MT

All percentages have been rounded to the nearest whole number. Thus row and column totals may not necessarily add to 100 but are shown as 100 percent.

REVIEW OF PREVIOUS STUDIES

Fourteen previous follow-up studies on graduates in the Division of Technology have been conducted and published. The first report was published in 1957 and the most recent report was in 1971.

These reports contain baseline information on the career patterns of students, their entry positions and salaries, and their supervisory responsibility and opportunities for promotion. Also described are the further educational pursuits of graduates as measured by advanced degrees, credits earned and the institutions and curricula in which these pursuits were undertaken.

Data from studies conducted in the past ten years, 1965, 1966, 1968, 1969, 1970 and 1971, are summarized for four variables: starting salaries, retention rates in a related field, further college attendance, and degrees in progress and completed.

Median Starting Salaries

Year of Graduation *	Day	Inc (Dec)	Evening	Inc (Dec)	All	Inc (Dec)
1965					$5,620	
1966					$5,840	+ $220
1968	$7,150		$ 8,730			
1969	$7,380	+ $130	$10,000	+$1,270		
1970	$7,600	+ $220	$ 9,890	- $110		
1971	$8,250	+ $650	$10,100	+ $210		

The data in Figure 1 taken from the 1971 survey shows a steady increase in salaries of selected classes of Technology alumni since their graduation from New York City Community College. It is interesting to note that data for the cluster of classes (1950, 1955, 1960, 1965, 1968, and 1970) which graduated one year earlier and diagrammed in the 1970 survey showed very similar patterns for alumni salary increases over an extended period of time.

Retention rates in engineering-related fields for the six years noted above were high ranging from 83 percent in 1971 to 92

*The 1965 survey covers Chemical, Construction, Electrical and Mechanical Technology graduates while the 1968, 1969, 1970 and 1971 surveys cover Design Drafting and Electromechanical Technology graduates in addition to those surveyed in 1965.

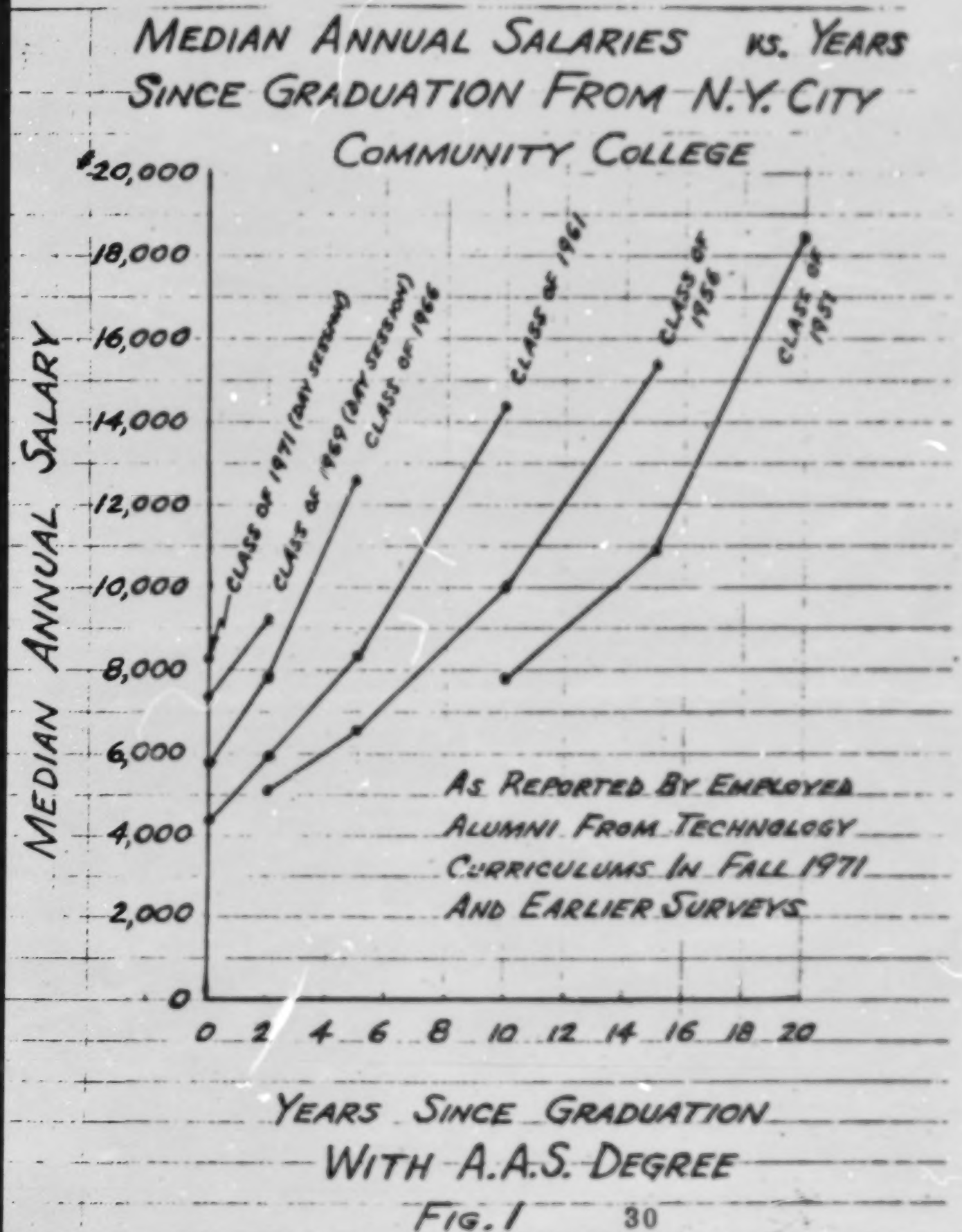

MEDIAN ANNUAL SALARIES VS. YEARS SINCE GRADUATION FROM N.Y. CITY COMMUNITY COLLEGE
MEDIAN ANNUAL SALARY
$20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
CLASS OF 1971 (DAY SESSION)
CLASS OF 1969 (DAY SESSION)
CLASS OF 1966
CLASS OF 1961
CLASS OF 1956
CLASS OF 1951
AS REPORTED BY EMPLOYED ALUMNI FROM TECHNOLOGY CURRICULUMS IN FALL 1971 AND EARLIER SURVEYS
0 2 4 6 8 10 12 14 16 18 20
YEARS SINCE GRADUATION WITH A.A.S. DEGREE

FIG. 1

percent to 1965 as shown below:

Year of Survey	Number of Classes Surveyed	Retention	
		Number	Percent
1965	5	434	92%
1966	5	459	90%
1968	5	414	91%
1969	4	378	88%
1970	4	333	86%
1971	4	366	93%

Further college attendance among graduates in the 1965, 1968, 1969, 1970, and 1971 classes ranged from 52 percent in 1971 to 65 percent in 1965. The proportion of degrees in progress for these graduates was slightly lower ranging from 37 percent to 1965 to 49 percent in 1971. Examination of degrees in progress or completed by alumni 5 years after graduation from New York City Community College reveals that although a given student may have completed a further degree and be pursuing another degree, the number of degrees completed or in progress 5 years after graduation is considerable.

Class	Number of Respondents	Number Attended College	Percent	Degrees in Progress	Degrees Completed
1966	65	37	57%	24	13
1965	116	76	67%	50	18
1964	123	72	58%	40	21
1963	96	61	65%	35	27
1960	125	93	65%	52	23

RESULTS

The results in this study are reported in the order of the objectives presented in the introductory section of the report.

Present occupational status

Beginning with the present occupational status of graduates, Tables 4 through 10 contain information concerning present employment. The series of questions devoted to this variable was apparently more relevant for earlier graduates as contrasted to more recent graduates since there is a decreasing proportion of respondents to each successive year replying to these questions. This may be a function of recent graduates continuing their education while earlier graduates may have already completed their studies. For example, Table 4 shows that in 1969 and 1970, almost 95 percent of the respondents answered this question while in 1971, 1972 and 1973, the percentage dropped to about 80. In 1974 the response rate was 69 percent and in 1975, it was 58 percent.

The present occupational status of responding graduates is shown in Table 4. Of the 922 respondents, 767 or 77 percent are employed, 14 percent are full-time students, 9 percent are unemployed, and one percent are in military service or retired. Of those respondents who are employed 68 percent are engaged in business or industry, 29 percent are employed in a government agency and 3 percent are self-employed. Among those employed in business or industry, 75 percent of the 1969 class is represented in this category as contrasted to 50 percent of the 1974 class. Over 35 percent of the 1973 and 1974

TABLE X

PRESENT OCCUPATIONAL STATUS OF 1969 to 1973
RESPONDER GRADUATES

OCCUPATIONAL STATUS	1969		1970		1971		1972		1973		1974		1975		Total	
	M	%	M	%	M	%	M	%	M	%	M	%	M	%	M	%
Employed in Business & Industry	47	71	63	67	43	58	73	57	79	64	58	49	83	44	486	53
Employed in Government Agency	20	30	23	24	29	39	38	30	47	38	51	43	94	50	342	37
Self Employed	2	3	5	5	3	4	6	5	8	6	9	8	7	4	40	4
Sub Total	69	94	88	93	91	94	117	91	134	78	98	83	184	97	868	94
Full Time Student	3	4	5	5	3	4	8	7	28	23	19	16	5	3	71	8
Housewife	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6	1
Serving in Armed Forces	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6	1
Unemployed or Disabled	0	0	0	0	10	10	10	10	17	10	11	9	17	9	80	9
Other	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7	1
Total	74	100	96	100	107	100	133	100	171	100	131	100	189	100	921	100
Graduate Med School		1		1		1		1		1		1		1		

[illegible] are employed in a government agency during the 1985, 1990 and 1995 classes recorded 31, 40 and 37 percent, respectively. Many of the 1972 graduates were self-employed during the 1975 and 1977 classes recorded 6 percent of them either in this category.

Of the 511 respondents per [illegible] category, 197 are full-time employees, 56 are self-employed, 4 are working in the different services and 1 are retired. The largest number of 1972 (North) and 1972 (North) unemployed graduates are full-time employees. The 1972 class of unemployed graduates in [illegible] includes persons as "full-time students" and "unemployed" categories, 11 and 19 percents, respectively. In the 1972 class, 4 graduates were full-time students while in the remaining three classes, 1985 (1975), and 1975, full-time students were few.

For the whole group of respondents in each class, the unemployed [illegible] ranged from 1 percent in 1985 and 1975 to 21 percent in 1972. The remaining percentages were 10 percent in 1972 and 1977, 5 percent in 1975, and 6 percent in 1972.

Table 4a presents the data in curricular area. The proportion of respondents employed in curricular area ranges from 27 to 56 percent while the proportion of unemployed ranges from 1 to 21 percent.

Curricular Area	Percent Employed	Percent Unemployed
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

[illegible]

[illegible]

[illegible]

[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

[illegible]

| | | |

Relationship Between Present Job and Curriculum Area	Curriculum Area	Percent
"Very close"	Environmental Control Technology	59%
	Automotive Technology	50%
	Fire Protection Technology	42%
	Construction Technology	38%
"Fairly close"	Electrical Technology-Brooklyn	31%
"Somewhat close"	Machine Tool Technology	38%
	Electromechanical Technology	36%
	Electrical Technology-Voorhees	32%
	Mechanical Technology	31%
"Not at all"	Industrial Arts Education	56%
	Architectural Technology	42%

Design Drafting graduates selected each of these options equally, i.e. one-quarter of the time.

Data pertaining to the length of time graduates have been employed in their present job title are presented in Table 7. Twenty-four percent of the respondents have held their present position less than one year: the proportion increasing, in general, from 9 percent in the 1969 class to 52 percent in the 1975 class. About one-third of the respondents have been in their present job between one and three years; roughly two-fifths for the 1969 and 1974 graduates, about one-third for the 1970, 1971, 1972 and 1973 graduates and one-quarter for the 1975 graduates.

Between 35 and 40 percent of the 1969 to 1972 graduates have held their present job 3 to 7 years while 17 percent in each of the remaining three classes have done so. Twenty-seven percent of the total respondent population have been employed in their present job for 3 to 7 years. About 20 percent of the 1970, 1973 and 1974 graduates have been employed in their present job 7 years or more with slightly over 10 percent of the 1969, 1971 and 1972 classes indicating

TABLE 7
LENGTH OF TIME IN PRESENT JOB TITLE
OF 1969 TO 1975 EMPLOYED GRADUATES

Number of Years in Job	1969		1970		1971		1972		1973		1974		1975		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Less than 1 year	8	9	11	12	16	17	23	21	33	26	17	20	60	52	168	24
1 - 2.9 years	40	44	26	30	34	36	33	31	47	37	36	43	28	24	244	34
3 - 4.9 years	15	17	20	23	25	27	33	31	15	12	6	7	9	8	123	17
5 - 6.9 years	17	19	15	17	8	9	5	4	7	5	9	10	10	9	71	10
7 - 8.9 years	2	2	5	6	6	6	7	6	7	5	3	4	2	2	32	5
Over 9 years	8	9	11	12	5	5	8	7	19	15	14	16	6	5	71	10
TOTAL	90	100	88	100	94	100	109	100	128	100	85	100	115	100	709*	
PERCENT PER YEAR	13		12		13		15		18		12		16			100

*Question not applicable or not answered by 213 respondents.

this tenure length and 7 percent of the 1975 graduates reporting the same. Over all classes the average was 15 percent.

Table 7a categorizes this data by curriculum. The largest proportion of graduates in every curriculum except one have been employed in their present job titles from less than one year to 2.9 years. The proportions range from 56 percent in Electrical Technology-Brooklyn to 89 percent in Environmental Control Technology. In Fire Protection Technology, 68 percent of the graduate respondents have been employed in their present job title for 5 years or more.

A vital concern in any follow-up study is the job supervisory responsibility of graduating students. Table 8 shows the proportion of presently employed graduates in related occupations with senior, supervisory, managerial or professional positions.

Of the 607 graduates employed in related jobs, 268 (44%) have senior, supervisory, managerial or professional positions. While the classes of 1969, 1970 and 1971 have about three-fifths of their alumni in supervisory positions; this proportion, not unexpectedly, decreases in the more recent years under study with 49 percent in the 1972 class in supervisory positions; 40 percent in 1973, 25 percent in 1974; and 23 percent in 1975.

By curriculum area, percentages range from lows of 22 percent in Design Drafting Technology and 32 percent in Fire Protection Technology to highs of 64 percent in Mechanical Technology and 58 percent in Construction Technology. Half of the employed alumni in Architectural Technology and Electromechanical Technology hold supervisory positions

TABLE 7a

LENGTH OF TIME OF EMPLOYED GRADUATES IN PRESENT JOB TITLE BY CURRICULUM AREA*

Years	AR		AT		CT		DD		EC		EIB		ETV		EM		FT		LA		MC		MI	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Less than 1 year	5	26	11	38	24	18	13	33	16	43	31	21	9	28	24	48	2	2	9	36	4	29	20	29
1 - 2.9 years	10	53	13	45	51	39	15	38	17	46	51	35	12	38	14	28	26	22	12	46	4	29	19	28
3 - 4.9 years	2	11	2	7	28	21	10	26	1	3	37	26	8	25	6	12	9	8	2	8	4	29	14	20
5 - 6.9 years	2	11	2	7	14	4	1	3	2	5	13	9	2	6	6	12	19	16	2	8	1	7	7	10
7 - 8.9 years	0	-	1	3	9	7	0	-	0	-	2	1	0	-	0	0	15	13	0	-	0	-	5	7
More than 9 years	0	-	0	-	6	5	0	-	1	3	11	8	1	3	0	0	46	39	1	4	1	7	4	6
Total	19	100	29	100	132	100	39	100	37	100	145	100	32	100	50	100	117	100	26	100	14	100	69	100

*See page 14 for identification of abbreviations for curriculum

TABLE 8
PROPORTION OF PRESENTLY EMPLOYED 1969 to 1975 GRADUATES IN RELATED OCCUPATIONS WITH SENIOR, SUPERVISORY, MANAGERIAL OR PROFESSIONAL POSITIONS

CURRICULA*	1969		1970		1971		1972		1973		1974		1975		Total		
	Y	T	Y	T	Y	T	Y	T	Y	T	Y	T	Y	T	Y	T	%Y
AE	2	3	1	3	0	1	1	2	0	0	2	3	0	0	6	12	50
AT	3	3	1	2	1	1	0	2	1	4	0	1	1	7	7	20	35
CT	12	19	12	14	9	14	14	21	10	19	6	13	6	18	69	118	58
DD	1	3	0	3	1	3	2	4	2	4	0	4	0	6	6	27	22
EC	2	4	0	0	1	1	1	3	3	8	3	6	2	12	12	34	35
ETB	11	20	10	21	10	21	8	23	8	18	2	8	2	16	51	127	40
ETV	2	4	3	5	1	3	2	5	2	7	0	0	1	3	11	27	41
EM	3	5	5	7	3	6	4	7	6	7	1	4	3	10	23	46	50
ET	2	7	5	9	11	16	4	16	7	32	3	23	4	11	36	114	32
IA	0	0	0	0	0	0	1	1	2	4	1	6	1	1	5	12	42
MC	0	1	3	5	1	2	2	3	0	0	0	0	0	3	6	14	43
MT	6	11	9	12	8	12	7	7	5	6	0	5	1	3	36	56	64
TOTAL	44	80	49	81	46	80	46	94	44	109	18	73	21	90	268	607	
TOTAL %Y:		55		60		58		49		40		25		23			44

Y: Yes, have senior, supervisory, managerial or professional positions
T: Total number employed in related occupations

*See page 14 for identification of abbreviations for curricula

while one-third to one-fifth of the graduates in the remaining programs are so employed.

The data in Table 9 report the present salaries of employed graduates from 1969 to 1975. Ten percent of the respondents earned over $30,000 a year in their present job. About 10 percent of the 1969, 1970, and 1973 graduates earned over $30,000. For 1970 and 1971 graduates, the percentages were 17 and 18 percent, respectively, and for 1974 and 1975 graduates, 5 and 3 percent, respectively.

Forty percent of the respondents earn between $14,001 and $30,000 a year. Two-fifths to one half of the 1969, 1970, 1971 , 1973 and 1974 graduates are represented in this grouping while the proportion of 1972 graduates was 34 percent and of 1975 graduates, 23 percent. Forty-three percent of all respondents earned between $8,001 and $14,000 per year. About half of the 1972, 1974 and 1975 graduates were in this grouping while between one-third and two-fifths of the 1969, 1970, 1971 and 1973 graduates earned salaries in this range. Six percent of all respondents earned $8,000 or less, and of this group less than one percent (0.4) earned less than $5,000. For the 1969, 1970, and 1971 graduating classes, only one percent of each class earned $8,000 or less. The percentage for the 1972 class was 3 percent in the $5,001 to $8,000 category while in 1973 , 5 percent of the class earned $5,001 to $8,000 and 2 percent earned less than $5,000. Among members of the 1974 and 1975 classes between $5,001 and $8,000 was earned by 8 and 17 percents, respectively. Four percent of the 1975 class earned less than $5,000.

TABLE 9

PROVIDENT BALANCES OF [illegible] AS [illegible] EMPLOYEES CONTRIBUTORS

Provident Balance	[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		Total	
	M	%	M	%	M	%	M	%	M	%	M	%	M	%	M	%
$ 1,000 and Under	0	0	1	1	0	0	0	0	1	2	0	0	1	4	3	1
$ 1,001 - 4,000	1	1	0	0	1	1	3	3	7	5	7	8	14	17	37	5
$ 4,001 - 11,000	8	10	8	10	11	12	18	18	21	14	23	30	14	16	131	19
$11,001 - 14,000	17	32	23	28	17	18	17	15	26	19	13	16	10	17	163	24
$14,001 - 17,000	21	26	24	30	26	28	21	22	17	26	10	22	14	13	149	21
$17,001 - 20,000	14	21	10	12	10	11	11	12	11	10	10	10	11	10	111	16
Over $20,000	8	10	13	17	10	10	11	10	13	10	1	1	1	1	76	10
Total	No.	100	80	100	81	100	106	100	170	100	83	100	109	100	695	
Average Per Year	17		13		13		15		24		12		16			100
Maximum Variance	[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]	

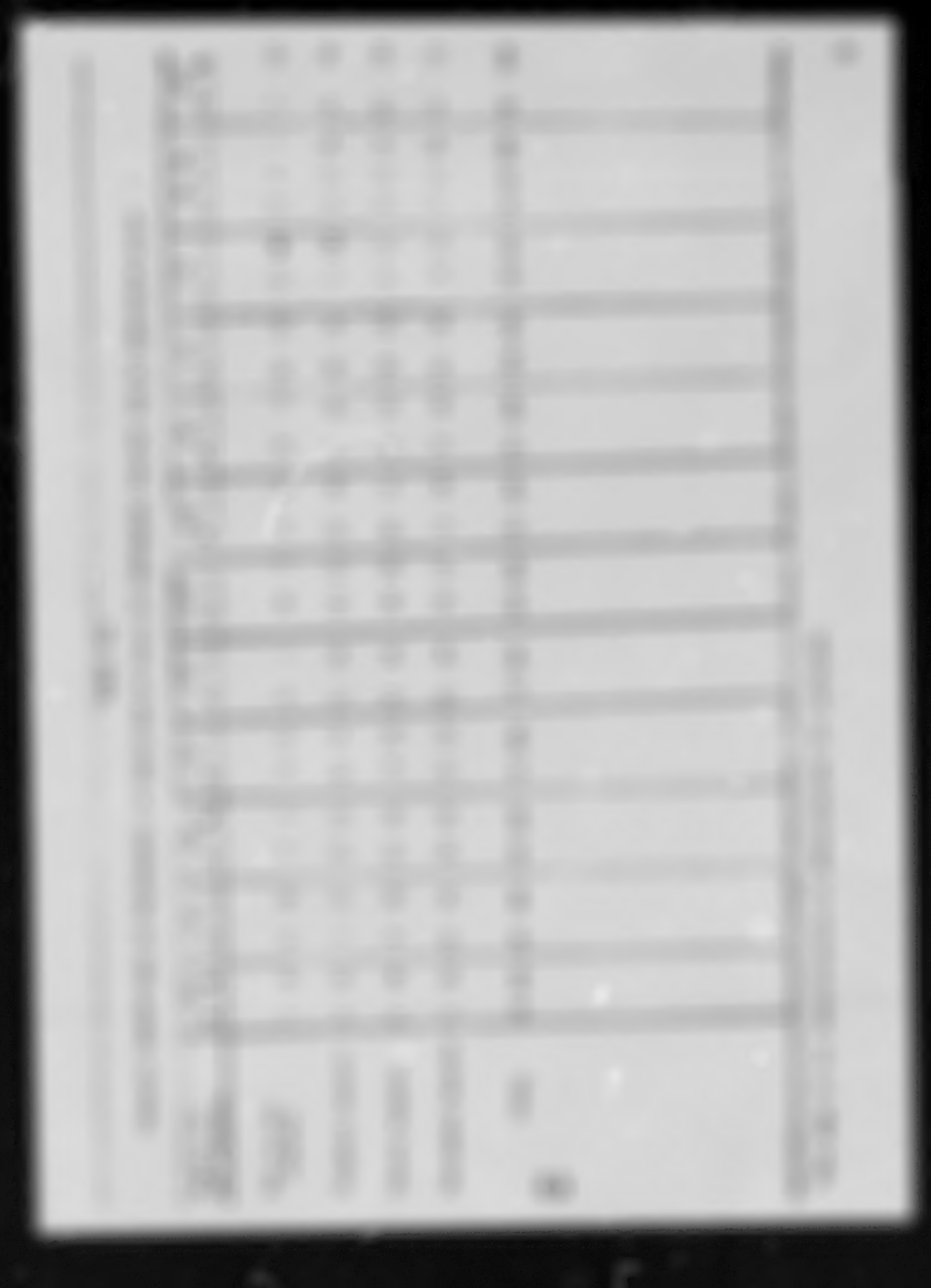
* Equations not applicable as not accounted for [illegible] requirements

The median salaries for the entire group of respondents was $31,700. Median salaries ranged from a low of $30,000 to $35,000 to a high of $41,000 to $45,000.

Table 36 shows salaries data by curriculum area. Most [illegible] graduates earned the highest salaries and 50 percent of them graduated earning $41,000 or more and divided salary equally among three groups -- $41,000-$51,999, $52,000-$59,999, and over $59,999. Seven percent of Electrical Technology graduates earn $31,000 or less a year as do 38 percent of the Mechanical Technology graduates. For the remaining curriculum, 50 percent or more of the graduates earn more than $31,000. Fifty-one percent in Medical Tech Technology were between $31,000 and $41,999 while 47 percent of Mechanical technicians, 45 percent in Biology Technology, 45 percent in Electromechanical Technology, 38 percent of Electrical Instrumentation Technology, and 38 percent of Electromechanical technicians were between $32,000 and $41,999. Thirty-two percent of accountants and 31 percent of Architectural technicians were between $0,000 and $41,999 while 38 percent of Industrial Arts Education graduates were $31,000 or $41,999 a year.

The median income for each of these curriculum areas is shown below:

Curriculum Area	Median Income
Industrial Arts Education	$41,999
Biology Technology	$41,999
Architectural Technology	$41,999
Medical Tech Technology	$41,999
Electromechanical Technology	$41,999



Thirty percent of the respondents thought their curriculum was "somewhat related" to their first job. The data for four classes matched this percentage -- 1969, 1972, 1973 and 1974 -- while 16 percent of the 1975 class and about 40 percent of the 1970 and 1971 classes selected this option. Eighteen percent of the respondents perceived their curriculum area as "not related" to their first job. Percentages for the 1969, 1970 and 1971 classes fell below this proportion while the 1975 class selected this option 35 percent of the time.

The relationship between first job and curriculum is shown for each curriculum area in Table 11a. The most frequently chosen options by curriculum area are:

"Extremely Well Related"	Automotive Technology	49%
	Environmental Control Technology	49%
	Construction Technology	36%
"Fairly Well Related"	Electrical Technology-Voorhees	37%
	Electromechanical Technology	37%
	Fire Protection Technology	37%
	Mechanical Technology	36%
	Design Drafting Technology	33%
	Electrical Technology-Brooklyn	32%
"Somewhat Related"	Machine Tool Technology	38%
"Not Related"	Industrial Arts Education	44%
	Architectural Technology	40%

Data collected pertaining to the first job field retention of graduates are presented in Table 12. Overall the first job retention rate was 88 percent for all responding graduates. The

TABLE 11a

RELATIONSHIP BY CURRICULUM AREA* BETWEEN FIRST JOB AFTER GRADUATION AND CURRICULUM AREA AS PERCEIVED BY GRADUATES

Relationship	AR		AT		CT		DD		EC		ETB		ETV		EM		FT		LA		MC		MT	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Not related	10	40	11	30	20	14	13	29	3	8	27	19	7	17	5	10	10	11	14	44	3	19	8	13
Somewhat related	5	20	3	8	30	20	9	20	12	31	32	23	9	22	15	31	24	26	2	6	6	38	8	28
Fairly well related	5	20	5	14	44	30	15	33	5	13	45	32	15	37	18	37	35	37	8	25	4	25	23	36
Extremley well Related	5	20	18	49	53	36	8	18	19	49	38	27	10	24	11	22	25	27	8	25	3	19	15	23
TOTAL	25	100	37	100	147	100	45	100	39	100	142	100	41	100	49	100	94	100	32	100	16	100	64	100

*See page 14 for identification of abbreviations for curricula

TABLE 12

FIRST JOB FIELD RETENTION OF 1969 to 1975 GRADUATES
AS JUDGED FROM ENTIRE QUESTIONNAIRE

CURRICULUM	1969		1970		1971		1972		1973		1974		1975		Total		
	R	T	R	T	R	T	R	T	R	T	R	T	R	T	R	T	% R
AR	4	4	4	4	2	3	2	2	1	2	3	6	2	3	18	24	75
AT	2	3	2	2	2	2	2	3	6	6	2	2	9	15	25	33	76
CT	19	19	16	16	23	26	23	25	20	22	17	19	16	21	134	148	90
DD	4	4	2	3	1	2	6	9	6	8	6	7	6	8	31	41	76
EC	4	4	0	0	1	1	4	5	9	11	7	7	14	14	39	42	93
ETB	19	21	20	22	23	26	24	26	19	21	6	8	18	22	129	146	88
ETV	6	6	6	6	6	6	6	6	9	14	0	0	3	3	36	41	88
EM	5	5	7	8	6	7	7	7	7	7	4	4	10	11	46	49	94
FT	6	6	7	7	17	17	16	16	33	35	20	20	11	12	110	113	97
IA	0	0	0	0	0	0	5	5	2	5	9	12	2	9	18	31	58
MC	1	1	5	5	2	2	2	3	0	0	0	0	3	3	13	14	93
MT	11	13	14	14	13	13	7	7	9	9	5	7	2	4	61	67	91
TOTAL	81	86	83	87	96	105	104	114	121	140	79	92	96	125	660	749	
TOTAL % R		94		95		91		91		86		86		77			88

R=Retention
T=Total number employed

*See page 14 for identification of abbreviations for curricula

retention rate, in general, declined over the 7-year period from 94 percent in 1969 to 77 percent in 1975. Retention rates by curriculum area exceeded 90 percent in six programs -- Fire Protection Technology (97%), Electromechanical Technology (94%), Environmental Control Technology and Machine Tool Technology (93% each), Mechanical Technology (91%) and Construction Technology (90%). High retention rates in Electrical Technology-Brooklyn and Voorhees were also recorded (88%) while about a 75 percent retention rate was recorded for Architectural Technology, Automotive Technology and Design Drafting Technology. The retention rate in first job field retention for Industrial Arts Education was comparatively low -- 58 percent.

Salaries have become increasingly important as a measure of job success in a recessionary economy. Table 13 shows the first job salaries of graduates. The salaries reported depend on the accuracy of a graduate's recollections dating back as far as 7 years and therefore are probably less reliable than data concerning their present activities. Ten percent of the graduate respondents reported they earned $15,000 or more on their first job after graduation from New York City Community College; 39 percent reported they earned between $9,001 and $15,000 32 percent said they earned $7,001 to $9,000 and 19 percent indicated earnings of $7,000 or less. Fourteen graduates (2%) earned $19,001 or over on their first job -- six of these were graduated in 1971 while no other class had more than two

TABLE 13

FIRST JOB SALARIES OF 1969 to 1975 GRADUATES

FIRST JOB SALARY	1969 N	1969 %	1970 N	1970 %	1971 N	1971 %	1972 N	1972 %	1973 N	1973 %	1974 N	1974 %	1975 N	1975 %	Total N	Total %
$ 5,000 or less	3	4	6	7	3	3	10	10	7	6	2	2	14	15	45	7
$ 5,001 - 7,000	17	20	11	13	9	9	8	8	10	8	11	13	15	16	81	12
$ 7,001 - 9,000	40	47	32	37	30	31	36	35	31	24	20	24	27	28	216	32
$ 9,001 - 11,000	13	15	13	15	16	17	22	21	24	19	17	20	11	12	116	17
$11,001 - 13,000	7	8	15	17	14	15	11	10	18	14	10	12	11	12	86	13
$13,001 - 15,000	3	4	5	6	14	15	7	7	15	12	8	10	9	9	61	9
$15,001 - 17,000	1	1	1	1	1	1	4	4	11	9	8	10	2	2	28	4
$17,001 - 19,000	1	1	2	2	3	3	4	4	9	7	6	7	5	5	30	4
$19,001 - 21,000	0	0	1	1	1	1	0	0	0	0	1	1	0	0	3	0
Over $21,000	0	0	1	1	5	5	1	1	2	1	1	1	1	1	11	2
Total	85	100	87	100	96	100	103	100	127	100	84	100	95	100	677*	
Percent Per Year	13		13		14		15		19		12		14			100
Median Salary	$8,100		$8,700		$9,800		$8,900		$10,200		$10,100		$8,400		$9,000	

* Question not applicable or not answered by 245 respondents

graduates in this category. Of the 58 graduates earning between $15,001 and $19,000, 28 (48%) were in the class of 1973 and 14 (17%) in the class of 1974. Twenty-two percent of all graduate respondents reported first job earnings between $11,001 and $15,000. Of the 1969 class, only 12 percent reported earnings in this category while percentages for the other classes ranged from 17 to 30 percent. Almost half of the respondents reported earnings in the $7,001 to $11,000 categories; percentages for the 1969 and 1972 classes were somewhat high (62 and 58%, respectively), while those for the last three classes, 1973, 1974 and 1975 were somewhat lower (51, 49 and 49%, respectively). Nineteen percent of all respondent graduates reported first job earnings of $7,000 or less. The proportion in 1969 was somewhat high (24%); in 1971, 1973 and 1974, they were lower (15% or below). The remaining three classes (1970, 1972 and 1975) approximated the overall proportion of respondents choosing these categories. The median salary across all groups was $9,000.

Table 15a shows first job salaries by curriculum. The most frequent salary ranges of graduates by curriculum area were:

$15,001 - $19,000	Fire Protection Technology	38%
$ 7,001 - $ 9,000	Design Drafting Technology	52%
	Electromechanical Technology	47%
	Machine Tool Technology	46%
	Mechanical Technology	43%
	Automotive Technology	42%
	Construction Technology	36%
	Environmental Control Technology	33%
	Electrical Technology-Brooklyn	32%
	Electrical Technology-Voorhees	30%

TABLE 13a

EARLY AGE SALARIES OF GRADUATES BY FUNCTIONAL AREA

Salaries	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
$ 5,000 or lower	1 1%	4 2%	8 5%	4 3%	2 4%	8 7%	5 5%	4 9%	0 0%	2 1%	2 3%	2 3%	
$ 5,001 - 7,000	9 6%	5 5%	25 5%	7 6%	5 6%	21 19%	5 5%	4 9%	0 0%	7 3%	0 0%	5 8%	
$ 7,001 - 9,000	4 2%	54 6%	52 5%	23 2%	11 12%	40 35%	11 12%	23 6%	1 1%	7 3%	4 4%	26 30%	
$ 9,001 - 11,000	2 1%	3 3%	27 2%	1 1%	8 9%	20 17%	10 11%	10 2%	6 7%	6 3%	1 1%	13 15%	
$11,001 - 13,000	0 0%	5 5%	10 1%	3 3%	3 3%	11 9%	6 7%	5 5%	11 1%	5 2%	2 2%	9 10%	
$13,001 - 15,000	1 1%	2 2%	7 1%	3 3%	2 2%	9 7%	0 0%	0 0%	10 1%	3 1%	3 3%	5 6%	
$15,001 - 17,000	4 2%	1 1%	5 1%	0 0%	3 3%	5 4%	0 0%	0 0%	14 1%	0 0%	0 0%	3 3%	
$17,001 - 19,000	3 2%	3 3%	4 1%	0 0%	2 2%	4 3%	1 1%	0 0%	18 2%	0 0%	1 1%	1 1%	
$19,001 - 20,000	0 0%	0 0%	1 1%	0 0%	0 0%	0 0%	0 0%	0 0%	2 1%	0 0%	0 0%	0 0%	
$21,000 or more	1 1%	0 0%	3 1%	0 0%	0 0%	1 1%	0 0%	0 0%	1 1%	0 0%	0 0%	0 0%	
[illegible] Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
Median Salary	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	

* See page 10 for descriptions of abbreviations for curriculum

[illegible]

TABLE 16
CHANGE OF EMPLOYER BETWEEN FIRST JOB AFTER GRADUATION
AND PRESENT JOB BY 1969 TO 1975 EMPLOYED GRADUATES

Employer Category	1969 N	1969 %	1970 N	1970 %	1971 N	1971 %	1972 N	1972 %	1973 N	1973 %	1974 N	1974 %	1975 N	1975 %	Total N	Total %
Changed Employer	42	50	34	40	34	38	36	35	32	26	16	20	21	19	215	32
Same Employer	42	50	50	59	55	62	67	65	92	74	65	80	89	81	460	68
TOTAL	84	100	84	100	89	100	103	100	124	100	81	100	110	100	675	
Percent per year	12		12		13		15		18		12		16			100

TABLE 16a
CHANGE OF EMPLOYER BY CURRICULUM AREA* BETWEEN FIRST JOB AFTER GRADUATION
AND PRESENT JOB BY EMPLOYED GRADUATES

Employer Category	AR		AT		CT		DD		EC		ETB		ETV		EM		FT		IA		MC		MI	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Changed Employer	7	41	11	37	61	48	10	30	15	42	36	26	15	47	16	33	2	2	7	29	9	69	26	40
Same Employer	10	59	19	63	65	52	23	70	21	58	105	74	17	53	32	67	108	98	17	71	4	31	39	60
TOTAL	17	100	30	100	126	100	33	100	36	100	141	100	32	100	48	100	110	100	24	100	13	100	65	100

*See page 14 for identification of abbreviations for curricula.

Brooklyn, Industrial Arts Education, Electromechanical Technology, and Automotive Technology changed their employer. Not surprisingly, only 2 percent of Fire Protection Technology graduates changed their employer from their first job. This would seem to be a reflection of their tendency to retain a stable employment base both prior to and following college graduation.

In Table 17 data are presented that show the mobility of graduates in their employment patterns following graduation. Of interest is the change of job title between first job after graduation and present job by employed 1969 to 1975 graduates. Thirty-three percent of the employed respondents rose to a higher job title, 64 percent maintained a similar job title, and 3 percent indicated a lower level job title. Over half of the 1969 and 1970 classes had achieved higher job titles (52 and 55%, respectively). The percentages for the remaining classes were as follows: 1971, 41%; 1972, 25%; 1973, 31%; 1974, 18%; and 1975, 17%.

The range in percentages for graduates holding the same job title ranged from two-fifths for the 1969 and 1970 classes to four-fifths for the 1974 and 1975 classes. Only the class of 1969 had more than 5 percent with lower job titles and here the number was small.

Table 17a describes this data for each curriculum. Higher job titles were enjoyed by at least half of the graduates in Architectural Technology and Construction Technology (53 and 50%, respectively).

TABLE 17
CHANGE OF JOB TITLE BETWEEN FIRST JOB AFTER GRADUATION
AND PRESENT JOB BY EMPLOYED 1969 TO 1975 GRADUATES

Job Title Category	1969		1970		1971		1972		1973		1974		1975		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Higher Level Job Title	43	52	48	55	36	41	24	25	39	31	14	18	18	17	220	33
Similar Job Title	35	42	36	43	48	55	70	72	82	66	64	80	91	83	426	64
Lower Level Job Title	5	6	1	1	4	4	3	3	3	2	2	2	0	-	18	3
TOTAL	83	100	83	100	88	100	97	100	124	100	80	100	109	100	664	
Percent per year	12		12		13		15		19		12		16			100

TABLE 17a

CHANGE OF JOB TITLE BY CURRICULUM AREAS* BETWEEN FIRST JOB AFTER GRADUATION AND PRESENT JOB — EMPLOYED GRADUATES

Job Title Change	AR N	%	AT N	%	CT N	%	DT N	%	DC N	%	DTE N	%	DTV N	%	EM N	%	FT N	%	IA N	%	MC N	%	MI N	%
Higher level job title	9	53	10	33	60	50	13	41	11	30	48	35	11	34	17	35	16	15	1	4	3	13	20	32
Similar job title	7	41	18	60	59	49	19	59	23	64	89	63	19	59	31	65	91	84	21	88	9	69	40	63
Lower level job title	1	6	2	7	1	1	0	-	2	6	3	2	2	6	0	-	1	1	2	8	1	8	3	5
TOTAL	17	100	30	100	120	100	32	100	36	100	141	100	32	100	48	100	108	100	24	100	13	100	63	100

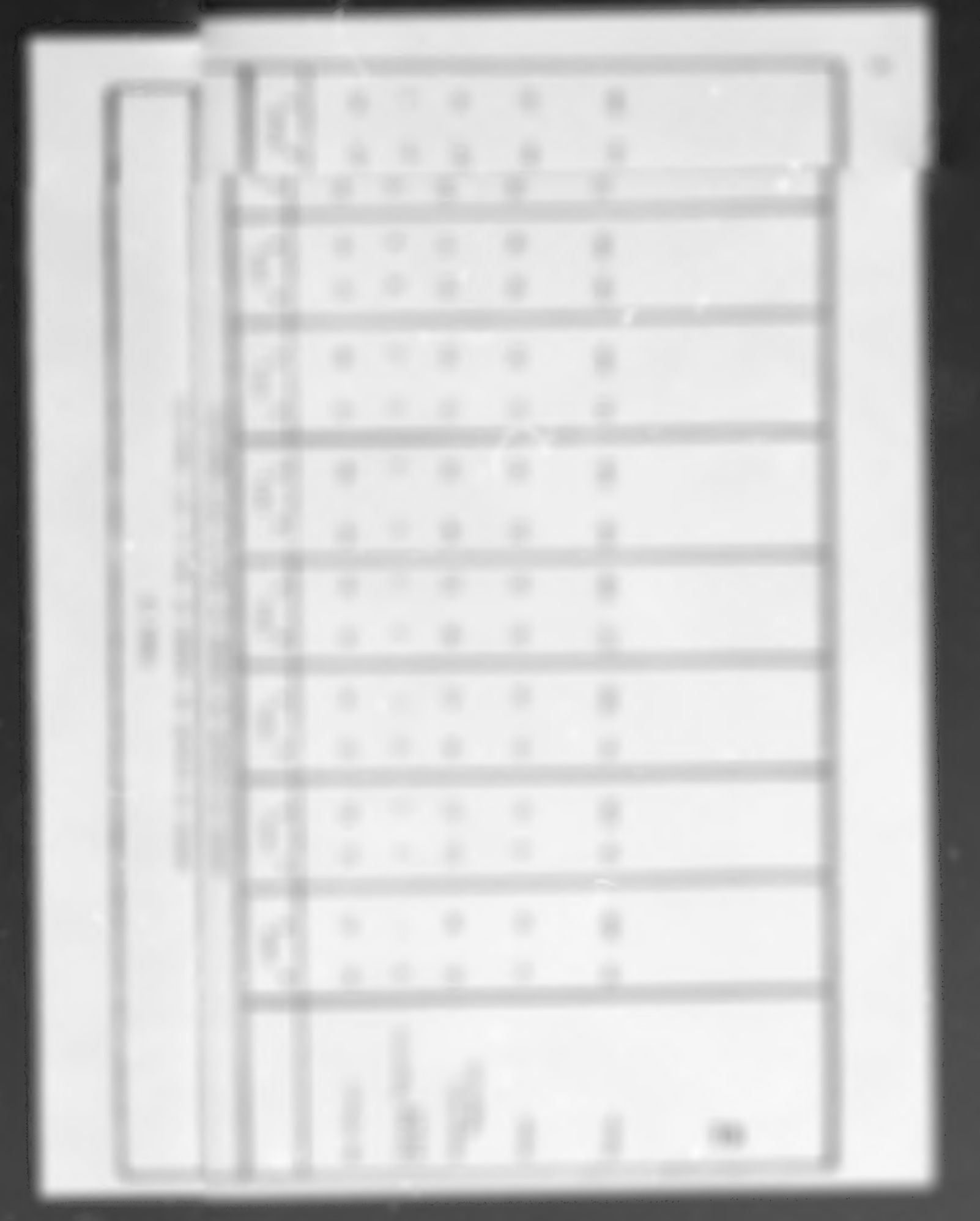
*See page 14 for identification of abbreviations for curricula

About one-fifth of the Design Drafting Technology graduates achieved higher job titles while 30 to 35 percent of those in Electrical Technology-Brooklyn and Voorhees, Electromechanical Technology, Automotive Technology, Mechanical Technology and Environmental Control Technology experienced the same. In Fire Protection Technology, Nuclear Fuel Technology and Industrial Arts Education, the proportion of graduates with higher job titles was relatively low (15, 13 and 4%, respectively) compared with other curricula.

WORK EXPERIENCE PRIOR TO AND DURING ENROLLMENT

Many students work in their prospective field of employment prior to graduation from the College. Table 19 shows graduate respondents' work experience in a technical field before or during enrollment at New York City Community College. Forty-nine percent of the respondents had no technical work experience while at NYCCC, 17 percent worked both before and during enrollment, 16 percent worked either full or part-time during enrollment, and 9 percent worked prior to enrollment. Six to 10 percent of the respondents in the 1969-1972 and 1974-1975 classes worked prior to enrollment while for the 1970 and 1973 classes, the proportions were 13 and 15 percents, respectively. Four classes, 1969, 1970, 1971 and 1975 had about one-fifth of their graduates employed during enrollment while the remaining three classes (1972, 1973, and 1974) had between 10 and 15 percent of their graduates employed. About 20 percent of the 1969 and 1975 classes, one-quarter of the 1970 and 1972 classes, and one-third

[illegible]



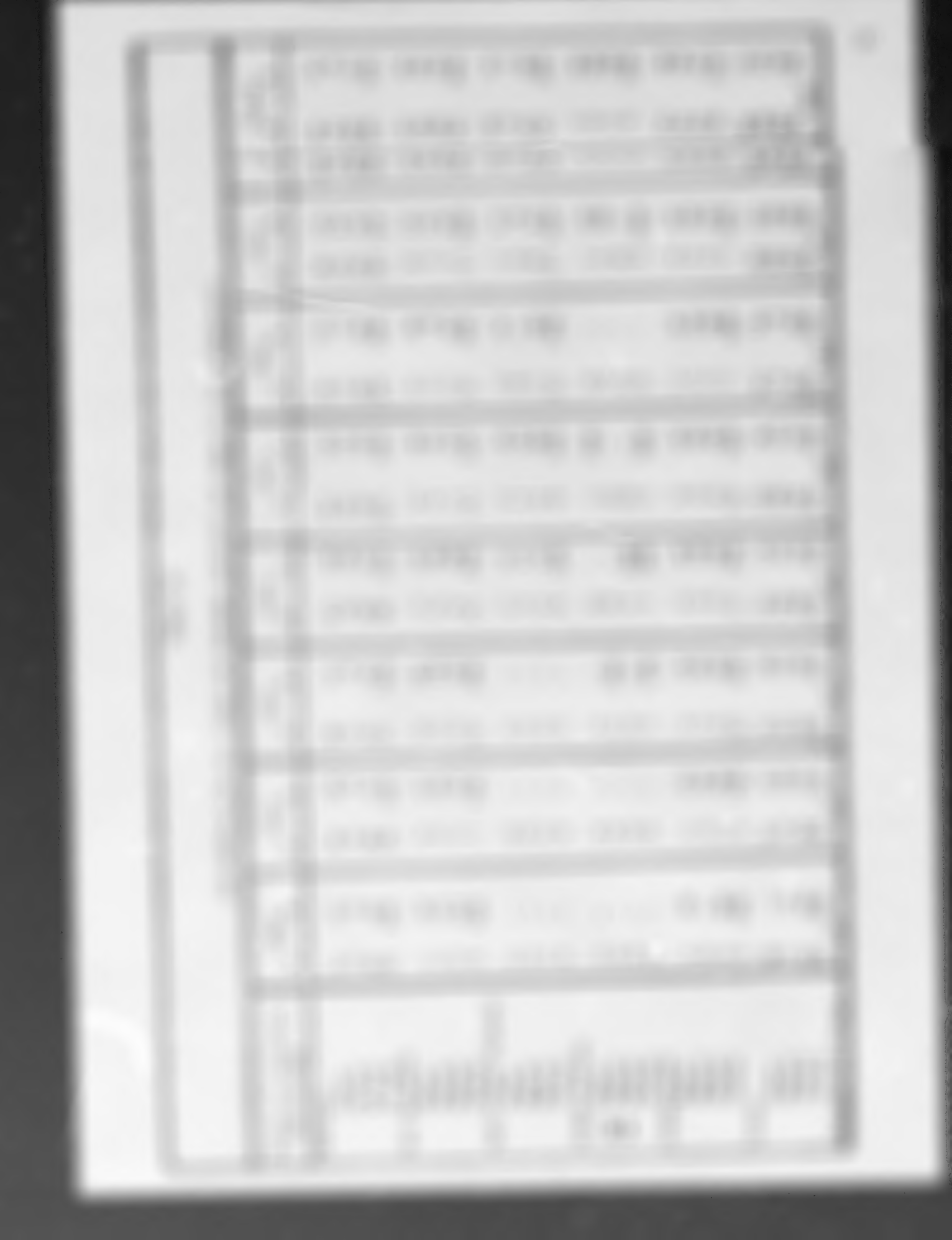


TABLE 20a

JOB RETRAINING VS. FIELD OF PRESENT ACTIVITY OF GRADUATES BY CURRICULUM AREA

Field of Activity Retraining	AR		AT		CT		DD		EC		ETB		ETV		EM		FT		IA		HC		MT	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Related																								
None	8	67	11	55	55	49	13	50	16	53	52	44	11	41	9	20	94	94	6	50	9	64	22	42
Major	2	17	3	15	8	7	3	12	1	3	13	11	5	18	10	23	2	2	0	-	1	7	6	11
Minor	2	17	6	30	49	44	10	38	13	43	54	45	11	4	25	57	4	4	6	50	4	29	25	47
Total	12	100	20	100	112	100	26	100	30	100	119	100	27	100	44	100	100	100	12	100	14	100	53	100
Not Related																								
None	5	71	1	13	8	62	2	33	0	-	6	46	4	67	0	-	0	-	3	30	0	-	8	67
Major	1	14	2	25	1	8	1	17	1	100	3	23	0	-	2	67	1	50	4	40	0	-	0	-
Minor	1	14	5	62	4	30	3	5/	0	-	4	31	2	33	1	33	1	50	3	30	0	-	4	33
Total	7	100	8	100	13	100	6	10)	1	100	13	100	6	100	3	100	2	100	10	100	0	-	12	100
Full-Time Student																								
None	2	25	3	100	2	50	2	100	0	-	2	33	1	25	0	-	0	-	3	50	0	-	4	80
Major	0	-	0	-	0	-	0	-	0	-	1	17	0	-	1	100	0	-	0	-	0	-	1	20
Minor	6	75	0	-	2	50	0	-	2	100	3	50	3	75	0	-	0	-	3	50	2	100	0	-
Total	8	100	3	100	4	100	2	100	2	100	6	100	4	100	1	100	0	-	6	100	2	100	5	100
Armed Forces																								
None	0	-	0	-	1	33	0	-	0	-	0	-	0	-	0	-	0	-	1	100	0	-	0	-
Major	0	-	0	-	2	67	0	-	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Minor	0	-	0	-	0	-	0	-	1	100	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Total	0	-	0	-	3	100	0	-	1	100	0	-	0	-	0	-	0	-	1	100	0	-	0	-
Unemployed																								
None	0	-	1	25	7	39	4	57	2	40	3	60	3	43	1	100	0	-	1	50	0	-	1	33
Major	1	33	2	50	2	11	1	14	1	20	0	-	0	-	0	-	2	100	0	-	0	-	2	67
Minor	2	67	1	25	9	50	2	29	2	40	2	40	4	57	0	-	0	-	1	50	1	100	0	-
Total	3	100	4	100	18	100	7	100	5	100	5	100	7	100	1	100	2	100	2	100	1	100	3	100
Total																								
None	15	50	16	46	73	49	21	51	18	46	63	44	19	43	10	20	94	90	14	45	9	53	35	48
Major	4	13	7	20	13	9	5	12	3	8	17	12	5	11	13	27	5	5	4	13	1	6	9	12
Minor	11	37	12	34	64	42	15	37	18	46	63	44	20	45	26	53	5	5	13	42	7	41	29	40
Total	30	100	35	100	150	100	41	100	39	100	143	100	44	100	49	100	104	100	31	100	17	100	73	100
Percent of Total	4		5		20		5		5		19		6		6		14		4		2		10	

FURTHER COLLEGE ATTENDANCE

Further college attendance after graduation from New York City Community College is shown for the 1969 to 1975 graduating classes in Table 21. Sixty-one percent of the respondent population attended college after graduation from NYCCC; ranging from a high of 68 percent for the class of 1971 graduates to a low of 58 percent for the class of 1974 graduates.

Classified by curriculum (Table 21a), the largest percentage of graduates going on to further study were recorded for Fire Protection Technology (91%). About three-quarters of graduates in Industrial Arts, Mechanical Technology and Architectural Technology continued their studies while about three-fifths of the graduates in Electrical Technology-Brooklyn and Machine Tool Technology engaged in advanced studies. About half the graduates in Construction Technology, Electrical Technology-Voorhees, and Electromechanical Technology, and 45 percent in Design Drafting went on to further studies. Thirty-eight percent of the graduates in Automotive Technology and Environmental Control Technology furthered their education in another institution.

When the further college attendance patterns of students are classified in terms of the type of institution of transfer selection -- CUNY or non-CUNY, several interesting trends emerge (Table 22). Of the 561 respondents engaging in further study after graduation from NYCCC, three-fifths attended CUNY colleges while two-fifths attended other colleges. Attendance at a CUNY institution varied over the study

TABLE 21
FURTHER COLLEGE ATTENDANCE AFTER GRADUATION
FROM NYCCC BY 1969 TO 1975 GRADUATES

College Attendance	1969		1970		1971		1972		1973		1974		1975		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Yes	55	59	59	64	76	68	81	62	98	61	73	58	119	60	561	61
No	39	41	33	36	35	32	49	38	63	39	52	42	81	40	352	39
TOTAL	94	100	92	100	111	100	130	100	161	100	125	100	200	100	913	100
Percent per year	10		10		12		14		18		14		22			

*Question not answered by 9 respondents

TABLE 21a

FURTHER COLLEGE ATTENDANCE OF GRADUATES BY CURRICULUM AREA*

College Attendance	AR		AT		CT		DD		EC		ETB		ETV		EM		FT		IA		MC		MT	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Yes	28	72	17	38	82	51	25	45	19	38	101	60	31	53	30	53	110	91	38	78	11	61	69	76
No	11	28	28	62	79	49	30	55	31	62	67	40	28	47	27	47	11	9	11	22	7	39	22	24
TOTAL	39	100	45	100	161	100	55	100	50	100	168	100	59	100	57	100	121	100	49	100	18	100	91	100

*See page 14 for identification of abbreviations for curricula

TABLE 22

FURTHER COLLEGE ATTENDANCE AT CUNY COLLEGE
VS. **NON CUNY** COLLEGE AFTER GRADUATION FROM NYCCC
OF CUNY AND NON CUNY GRADUATES

COLLEGE ATTENDED	1969 N	1969 %	1970 N	1970 %	1971 N	1971 %	1972 N	1972 %	1973 N	1973 %	1974 N	1974 %	1975 N	1975 %	Total N	Total %
CUNY	24	44	32	54	47	62	48	59	75	77	45	62	71	60	342	61
Non -CUNY	31	56	27	46	29	38	33	41	23	23	28	38	48	40	219	39
TOTAL	55	100	59	100	76	100	81	100	98	100	73	100	119	100	561	
PERCENT PER YEAR		10		11		14		14		17		13		21		100

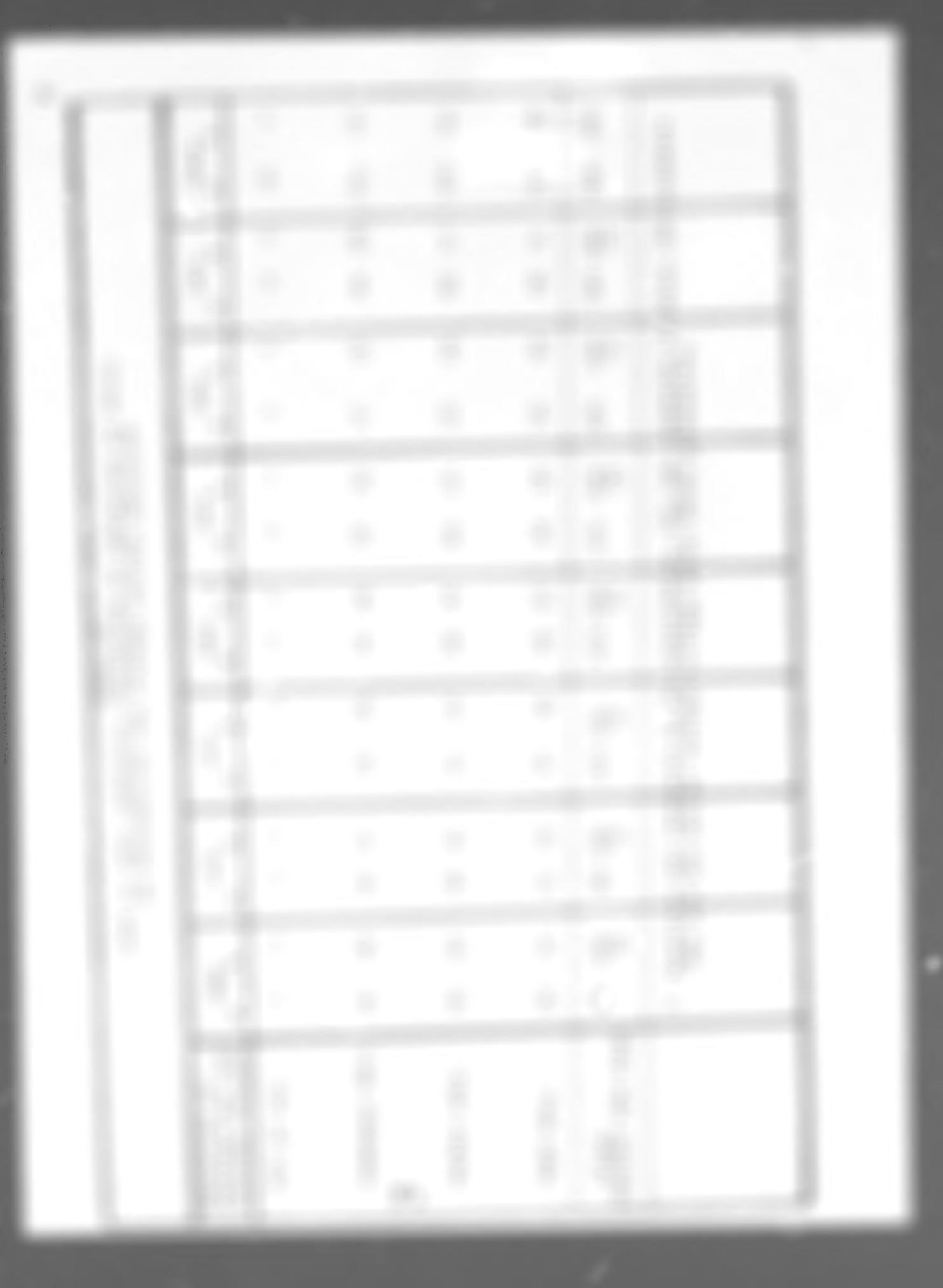
* Question not applicable or not answered by 361 respondents: those did not attend a college after graduation from NYCCC

352 (385) of

period from a low of 44 percent among the 1969 graduates to a high of 77 percent for the 1973 graduates. The increase in the proportion of graduates attending CUNY colleges in recent years is related to the availability of local Bachelor or Technology programs and the inception of the Industrial Arts Education transfer program.

Graduates in four curricula attended CUNY and non-CUNY colleges in about equal proportions -- Architectural, Design Drafting, Environmental Control and Mechanical Technologies (Table 23a). CUNY colleges were selected by the majority of the graduates pursuing the curricula: Fire Protection Technology (FPE), Electromechanical Technology (EET), Industrial Arts (IAT), Automotive Technology (AUT), Electrical Technology-Brooklyn (EEE), and Electrical Technology-Voorhees (EVE). Non-CUNY colleges were selected by a large majority of graduates in Machine Tool Technology (MTE) and Construction Technology (CNT).

Further college degrees sought or completed after graduation from New York City Community College by 1969 to 1973 graduates are shown in Table 24. Of those going on to advanced study, 84 percent sought a BS in engineering or a Bachelor of Technology (BT) degree; 9 percent sought a Bachelors of Arts, 2% percent sought another Bachelor of Science degree, and 5 percent sought a Masters Degree. In the 1969, 1970, 1971, 1974 and 1975 classes, 44 to 74 percent of graduates sought a BS/BT while three-fifths of the 1972 and 1973 graduates pursued this degree. Fewer than 10 percent of the 1969 , 1970 and 1971 classes sought another BS degree while in the 1972 through 1975



Mechanical Technology to a high of 35 percent in Automotive Technology.

Graduate perceptions of the helpfulness of elective courses at New York City Community College are shown in Table 26. One-quarter of the respondents found elective courses "very helpful"; three-fifths, "somewhat helpful"; and 14 percent of no help. Between 80 and 90 percent of all classes thought elective courses were somewhat or very helpful, the 1975 class selecting these choices most frequently (90%).

Table 26a shows this data by curriculum area. Over one-half (54%) of Automotive Technology graduates perceived elective courses as "very helpful". In the other eleven curriculum areas, "somewhat helpful" was chosen by from one-half to two-thirds of respondents.

GRADUATES' IMPRESSION REGARDING COMMUNITY COLLEGE CURRICULA AS PREPARATION FOR A CAREER

The impression of graduates regarding Community College curricula as preparation for a career reveals interesting patterns (Table 27). Eighty-three percent of the respondents perceived their curricula at New York City Community College as "very good" or "good", the remaining group finding it "fair" or "poor". The 1971 and 1975 classes indicated their curriculum was "good" or "very good" 87 percent of the time while the 1974 class responded to these categories 79 percent of the time.

Table 27a shows this item by curriculum areas. Three-quarters or more of all of the respondents in each curriculum selected either "good" or "very good" as their best description of the curriculum expertise at NYCCC in relation to their jobs. These percentages are

TABLE 26

HELPFULNESS OF ELECTIVE COURSES AS PERCEIVED BY 1969 to 1975 GRADUATES

DEGREE OF HELPFULNESS OF ELECTIVE COURSES	1969 N	1969 %	1970 N	1970 %	1971 N	1971 %	1972 N	1972 %	1973 N	1973 %	1974 N	1974 %	1975 N	1975 %	Total N	Total %
NOT AT ALL HELPFUL	13	14	13	14	17	16	24	19	22	14	16	15%	19	10	124	14
SOMEWHAT HELPFUL	56	62	58	65	64	59	73	58	87	57	63	58%	102	56	503	59
VERY HELPFUL	22	24	19	21	27	25	29	23	46	29	30	27%	61	34	234	27
TOTAL	91	100	90	100	108	100	126	100	155	100	109	100	182	100	861*	
PERCENT PER YEAR		11		10		13		15		18		13		21		100

* Question not answered by 61 respondents

TABLE 26a

HELPFULNESS OF ELECTIVE COURSES BY CURRICULUM AREA*
AS PERCEIVED BY GRADUATES

Helpfulness	AR N	AR %	AI N	AI %	C N	C %	GD N	GD %	EC N	EC %	ETB N	ETB %	ETV N	ETV %	GM N	GM %	PT N	PT %	LA N	LA %	MC N	MC %	MI N	MI %
Not at all	5	14	4	10	26	16	4	7	10	23	25	15	8	14	11	21	12	11	7	16	2	13	10	12
Somewhat helpful	19	53	15	37	109	68	37	69	25	57	85	52	37	65	28	54	68	60	25	60	8	53	46	57
Very helpful	12	33	22	54	26	16	13	24	9	20	54	33	12	21	13	25	33	29	10	23	5	33	25	31
Total	36	100	41	100	161	100	54	100	44	100	164	100	57	100	52	100	113	100	43	100	15	100	81	100
NR	4		5		2		1		6		6		2		6		9		6		3		11	

* See page 14 for identification of abbreviations for curricula

TABLE 27

1969 to 19[illegible] GRADUATES' OVERALL IMPRESSIONS OF THEIR CURRICULA AT SVCC
AS PREPARATION FOR A CAREER

IMPRESSION OF CURRICULA	1969 N	1969 %	1970 N	1970 %	1971 N	1971 %	1972 N	1972 %	1973 N	1973 %	1974 N	1974 %	1975 N	1975 %	Total N	Total %
POOR	2	2	4	5	7	7	5	5	10	7	8	7	11	6	48	6
FAIR	11	13	10	12	6	6	16	13	24	11	15	14	13	7	87	10
GOOD	40	46	38	45	52	49	53	44	66	46	38	35	81	45	368	44
VERY GOOD	34	39	33	38	40	38	46	38	53	36	48	44	74	42	328	39
TOTAL	87	100	85	100	107	100	121	100	143	100	110	100	179	100	832*	100
PERCENT PER YEAR		10		10		13		15		17		13		22		

* Question not answered by 91 respondents.

GS 8

Table 28

[illegible] 1968 to 1972 graduates which recommend their curriculum at least in their present

Recommending Units	1968 N	%	1970 N	%	1971 N	%	1972 N	%	1973 N	%	1974 N	%	1975 N	%	Total N	%
Yes	83	90	83	93	97	89	113	91	130	89	104	89	171	93	781	90
No	9	10	6	7	12	11	11	9	16	12	13	11	14	7	86	10
TOTAL	92	100	89	100	109	100	124	100	137	100	116	100	184	100	867*	100
Percent per Year		10		10		12		14		16		13		21		

* [illegible] were [illegible] to [illegible] curriculum.

[illegible]

[illegible]

[illegible]

[illegible]

since there are no matching upper level bachelor's programs for them to enter. About two-thirds of the students attended a CUNY institution and were seeking a BS degree. Two graduates had completed a BS degree. Regarding their education while at NYCCC, only about 10 percent found either their technology curriculum or their electives not at all helpful in their further education.

Almost 90 percent of the group had an overall impression of their curriculum as preparation for a career as good or very good and an equal proportion would recommend the College curriculum to their friends.

Construction Technology

There were 163 respondents who were graduated from the Construction Technology program. Twelve percent of this group are presently unemployed and only 4 percent are full-time students. Eighty-two percent were employed, almost three-quarters in business or industry, one-fifth in government agencies and 7 percent were self-employed. Of those employed, three-fifths have been in their present job one to five years. Twenty-eight percent earn up to $11,000 a year, another 28 percent earn between $11,000 and $14,000 a year, and 45 percent earn $14,000 or more a year. Almost 90 percent of this group work in a field-related job and three-fifths presently hold senior, supervisory, managerial or professional positions. About 70 percent felt there was a fairly close or very close relationship between both their present and first job and

and their NYCCC curriculum. About three-quarters of this group felt their education at NYCCC was fairly or extremely helpful in performing their present job and in getting and performing their first job.

Ninety percent of these technicians held their first job in a related field and 54 percent earned $7,000 to $11,000 per year on their first job. Three-quarters of the group have enjoyed a salary increase between their first and present job, a net increase of $4,600. About half of them have not only changed their employer but have a higher level job title.

Half of these alumni worked in a technical field before or during enrollment, 23 percent both before and during enrollment, and 20 percent during enrollment only. Half of the respondents felt a generally negative effect of the economy on their careers. Two-fifths required minor job retraining and one-tenth required major job retraining for performing their present activity.

Half of the group attended a senior college; 80 percent at a non-CUNY institution. Of the 62 (77%) alumni seeking a Bachelor of Technology degree, 24 have completed their requirements for this degree. Eighty percent of graduate technicians thought their education prepared them fairly or very well for further college and that their electives were somewhat or very helpful.

Eighty-six percent thought their preparation at NYCCC for a career was good or very good and 94 percent would recommend the College to their friends.

Design Drafting Technology

There were 55 respondents who were graduated from the Design Drafting Technology curriculum. Two-thirds of this group are presently employed, primarily in business or industry; 11 percent were full-time students and 22 percent reported they are presently unemployed. About 70 percent of the employed respondents have been in their present positions from less than one year to three years. Three-fifths of presently employed graduates earn between $8,000 and $14,000; the median salary being $11,400. Three-quarters of those presently employed are in a field-related position and of this group, only 22 percent hold senior, supervisory, managerial or professional positions. Regarding respondents' perception of the relationship between their present job and their curriculum, almost equal percentages selected each of the four options, "very close", "fairly close", "somewhat close", and "not at all". About two-thirds of the group thought their education at NYCCC was either slightly (34%) or extremely (32%) helpful while one-fifth thought it was fairly helpful.

Concerning helpfulness of their education in obtaining and performing their first job after graduation, 67 percent perceived it as fairly or extremely helpful while 14 percent thought it was slightly helpful.

Half of the respondents thought the relationship between their curriculum at NYCCC and their first job was "fairly well" (33%) or "extremely well" (18%) related, the other half selecting "somewhat" (20%) or "not at all" (29%). First job field retention for this group matched present job field retention (approximately

75 percent for each). The median first job salary of Design Drafting Technology respondents was $7,900. Two-thirds of the respondents enjoyed a salary increase between their first and present jobs -- a net change for the group of $3,500. Only 30 percent of this group have changed their employer between their first job after graduation and their present job but 40 percent have higher level job titles. Approximately two-thirds of this group did not work in technical jobs prior to or while enrolled in the College. Of the third who did work, 28% worked during their enrollment.

Forty-five percent of this group furthered their education at a senior college. They were almost equally divided between CUNY and non-CUNY institutions. Thirty-two percent of those furthering their education (N=25) sought a Bachelor of Technology degree, 36 percent a Bachelor of Science and 28 percent a Bachelor of Arts degree. Seven persons had attained one of these degrees.

Seventy-two percent of the graduates felt their education at NYCCC as preparation for further studies was very good or fairly good and 93 percent thought their electives were somewhat or fairly helpful.

Eighty-nine percent of Design Drafting graduates thought their curriculum at NYCCC as preparation for a career was good or very good and about the same percentage would recommend the College to their friends.

Environmental Control Technology

There were 50 respondents in the Environmental Control Technology curriculum. About three-quarters of these were employed, over half in business or industry, 12 percent were in the Armed Forces, and 6 percent were self-employed. Ten percent of this group were unemployed and 16 percent were full-time students. About 90 percent of those employed have held their present position for from less than a year to 3 years. Seventy-eight percent of these technicians earned $8,000 to $17,000 a year; 31 percent earned $8,000 to $11,000, 33 percent earned $11,000 to $14,000, and 34 percent earned $14,000 to $17,000 a year. Ninety-four percent currently work in a related field job and of these, 35 percent hold senior, supervisory, managerial or professional positions. Three-fifths of the group thought their curriculum was very closely related to their present job and 70 percent thought their education was fairly or extremely helpful in performing their present job as contrasted to 67 percent who perceived this relationship between their education and obtaining and performing their first job.

Fifty percent of the group thought the relationship between their first job after graduation and their curriculum area was extremely well related. Their first jobs were almost entirely in fields related to their curriculum. The median salary for first jobs for this group was $8,800. Three-quarters of the respondents had enjoyed a salary increase between their first and present jobs, a net increase of $5,200 for the group. Two-fifths had changed

employers. One-third had presently higher level job titles than they did just after graduation. Forty-four percent did not work in a technical field prior to or during enrollment, 22 percent worked before and 33 percent worked before and during, and 14 percent worked during enrollment. One-fifth felt a generally negative effect of the economy on their careers. Fifty-four percent required re-training for their present activity; 9 percent needed major retraining and 46 percent, minor retraining.

Thirty-eight percent of this group went on to a senior college and they were divided almost equally between CUNY and non-CUNY institutions. Of this group, four-fifths sought a Bachelor of Technology degree and 4 had completed this degree.

About three-quarters of the graduate respondents perceived their education at BMCC to be somewhat or fairly helpful and a like proportion thought their electives somewhat or very helpful.

Eighty-five percent of these alumni had a good or very good overall impression of their curriculum as preparation for a career and 89 percent would recommend the college to their friends.

Electrical Technology-Brooklyn

There were 170 respondents in the Electrical Technology-Brooklyn campus curriculum. Eighty-four percent of this group is currently employed, the majority in business or industry. Twelve percent are full-time students and 4 percent are unemployed.

[illegible] of the university employed graduates have held [illegible] present positions one to five years. The median salary of presently employed graduates was $10,000. Higher-than-present present positions [illegible] to a field related [illegible] out of this group, 60 percent held [illegible] supervisory, managerial or professional positions. Regarding graduate perceptions of the relationship between their curriculum at the college and their present job title, 36 percent thought the relationship was very close; 32 percent, fairly close; 36 percent, somewhat close; and 17 percent, not at all close. Half of the employed respondents thought their education was fairly or extremely helpful in performing their present job.

Two-thirds of respondents felt their education was fairly or extremely helpful in obtaining and performing their first job after graduation, and three-fifths of this group thought the relationship between their first job and their curriculum area was [illegible] or extremely well- [illegible]. First job field assistance for this group of graduates was 10 percent. Median first job salary was $9,000, giving a net increase between present and first job earnings of $1,000. Four-fifths of the respondents have enjoyed salary increases between their first and present jobs. Only one-fourth of the group have changed employers since graduation but 35 percent expect a higher job title. Half of the group did not work in a related field before graduation, 21 percent worked both before and during enrollment, 13 percent only before and 14 percent only during enrollment.

Three-fifths of these graduates considered their education, at persons at a [illegible] college. Three-fourths of graduates felt

[illegible]

(4)

This entire group of employed graduates is working in a machine tool-related field, almost half in senior, supervisory, managerial or professional positions. The median salary for this group was $12,300. Eighty-seven percent have been in their present job from less than a year to 5 years; 4 working a year or less, 4 working between 1 and 3 years, and 4 working 3 to 5 years. About 70 percent viewed the relationship between their present job and their curriculum at the college as either somewhat or fairly close while half of this group perceived their curriculum as extremely helpful in performing their present job.

About two-thirds of the graduates thought there was a somewhat or fairly close relationship between their curriculum and their first job and two-fifths found their education extremely helpful in getting and doing their first job. For about half of the group first job salaries ranged from $7,000 to $9,000 with a median of $8,500 and 93 percent of respondents' first jobs were in a machine tool-related field.

Seventy percent of the Machine Tool Technology graduates changed their employer since graduation. About three-quarters have enjoyed salary increases since graduation, a net increase of $3,800. Slightly over 10 percent have been promoted to a higher job title. Only two students felt the economy had a generally negative effect on their careers and five of the employed respondents required essentially minor retraining for performing their present job.

Although two-fifths did not work in a technical field prior to or during enrollment at the College, about one-quarter worked prior to enrollment and an additional one-quarter worked during enrollment.

Three-fifths of this group have attended college after graduation from NYCCC and of this group about 80 percent attended a non-CUNY institution. All but one alumnus was pursuing a BS degree and 6 had completed their degree requirements. Almost 90 percent felt their NYCCC education was somewhat or fairly helpful as preparation for further study including elective courses.

All but one of the graduates' overall impressions of their curriculum as preparation for a career were good or very good and they would not hesitate to recommend their curriculum at the College to their friends.

Mechanical Technology

There were 92 respondents who were graduates of the Mechanical Technology curriculum. Seventy-six percent of this group was employed, the majority in business or industry. Three-quarters of this group have held their present job from less than a year to 5 years. Eight percent of this group are presently unemployed. The median salary for employed graduates is $14,400. Four-fifths of this group are employed in fields related to the curriculum they pursued at NYCCC and of these, 64 percent hold senior, supervisory, managerial or professional positions.

About three-fifths of the group felt the relationship between their curriculum area at the College and their first and present jobs was somewhat or fairly close. Half of this group perceived their

education to be slightly helpful in performing their present job. However, over three-quarters of this group felt that their education was fairly or extremely helpful in getting and doing their first job. Ninety-one percent of mechanical technicians held their first job in a related field. The median first job salary for this group was $8,800. Three-quarters of the respondents have received a salary increase, a net increase of $5,600. Two-fifths of the group have changed their employer and about one-third hold a higher job title than they did when they were first employed. Although half of this group did not work in a technical field before or during enrollment, 27 percent did technical work both before and during enrollment.

Thirteen graduates felt a generally negative effect of the economy on their careers; 29 needed minor retraining and 9 needed major retraining to perform their present jobs.

Three-quarters (N=69) of the respondents have attended a senior college half at a CUNY institution. Fifteen are presently full-time students. Fifty-nine alumni pursued a Bachelor of Technology degree and 20 have completed this degree. Over four-fifths of the respondents thought their education at NYCCC prepared them fairly or very well for further college work and 90 percent of these technicians thought their electives were somewhat or very helpful.

Ninety-two percent had a good or very good overall impression of their curriculum at NYCCC as preparation for a career and 96 percent would recommend the College to their friends.

APPENDIX 1

Historical Sketch of The Division of Engineering Technology

Historical Sketch of The Division of Engineering Technology

Dates	
Fall 1946	New York State Technical Institute of Applied Arts & Sciences - 5 temporary State Technical Institutes created - - first director appointed.
Feb 1947	First class admitted to 2-year Diploma programs in Electrical Technology, Mechanical Technology, & Mechanical Technology - Structural Option (which became the Structural Technology Department and curriculum within the year). Several other curriculums offered in non-engineering related fields.
1948	State University of New York created. College becomes State University of New York Institute of Applied Arts & Sciences at New York City.
Feb 1949	First graduates from Electrical (25), Mechanical (38) and Structural (18).
Feb 1951	Last class to receive Diploma -- Authority to award associate in applied science degree granted to the institution along with permanent institutional status.
May 1951	First class to receive AAS degree
1953	College becomes New York City Community College. Structural Technology Department becomes Construction Technology Department.
July 1962	President Lawrence Jarvie establishes divisional structure. Division of Technology is one of 4 instructional divisions created.
Sept 1966	Electromechanical Technology program and Fire Science program established. (Fire Science was initially set in this division -- but was transferred to it within a year or so).
Sept 1967	Design-Drafting Technology program established.
Sept 1970	Industrial Arts Education program established.
July 1971	Voorhees Technical Institute is merged into City University and assigned to New York City Community College as a campus. Programs continued in Architectural Tech, Automotive Tech, Electrical Tech and Environmental Science Tech. Programs in Machine Tool Tech and the Building Construction Option of Architectural Tech discontinued.

August 1973	Jay Street Technology Building opens.
Sept 1973	Machine Tool Technology program reactivated.
Spring 1974	Architectural Technology, Automotive Technology, & Electromechanical Technology programs achieve department status.
Fall 1974	Environmental Science Technology becomes Environmental Control Technology.
Spring 1975	Fire Science program becomes Fire Protection Technology.
Feb 1976	Division title becomes Division of Engineering Technology.

[illegible]

[illegible]

[illegible]

[illegible]